

-350 mV for at least 5 days by adding the reducing agent, wherein the contaminated matter mixed with the reducing agent and the nutritional liquid has a water content of at least 40% by weight.

13. **(Twice Amended)** A method for purifying soil, sediment or sludge contaminated with a halogenated organic compound, which method comprises the step of:

adding a reducing agent to the contaminated matter, the reducing agent having a standard electrode potential ranging from 130 mV to -2400 mV at 25°C with respect to the standard hydrogen electrode, the reducing agent being at least one species selected from the group consisting of reduced iron, an iron-silicon alloy, a titanium alloy, a zinc alloy, a manganese alloy, an aluminum alloy, a magnesium alloy and a calcium alloy, whereby an oxidation reduction potential of the contaminated matter reduced is maintained at not more than -350 mV for at least 5 days by adding the reducing agent, wherein the contaminated matter mixed with the reducing agent and the nutritional liquid has a water content of at least 40% by weight.

28. **(Twice Amended)** A method of purifying a contaminated soil, sediment or sludge containing a halogenated compound and a solid matter, which method comprises the step of:

mixing a reducing agent and a water-soluble organic nutritional liquid containing a nutritional source for a heterotrophic anaerobic microorganism and water with the contaminated matter, the reducing agent having a standard electrode potential ranging from 130 mV to -2400 mV at 25°C with respect to the standard hydrogen electrode, wherein the mixing step includes a step of adjusting the contaminated matter at pH ranging from 4.5 to 9.0, whereby an oxidation reduction potential of the contaminated matter reduced is maintained at not more than -350 mV for at least 5 days by adding the reducing agent; and

keeping the mixture in a condition such that air hardly penetrates through a matrix, wherein the contaminated matter mixed with the reducing agent and the nutritional liquid has a water content of at least 40% by weight.

36. (Amended) A method for purifying soil, sediment or sludge contaminated with a halogenated organic compound, which method comprises the step of:

adding a reducing agent and a water-soluble organic nutritional liquid containing a nutritional source for a heterotrophic anaerobic microorganism to the contaminated matter, the reducing agent being a water-soluble compound having a standard electrode potential ranging from 130 mV to -2400 mV at 25°C with respect to the standard hydrogen electrode, whereby an oxidation reduction potential of the contaminated matter reduced is maintained at not more than +130 mV for at least 5 days by adding the reducing agent, wherein the contaminated matter mixed with the reducing agent and the nutritional liquid has a water content of at least 40% by weight.

38. (Amended) A method for purifying soil, sediment or sludge contaminated with a halogenated organic compound, which method comprises the step of:

adding a reducing agent to the contaminated matter, the reducing agent being a water-soluble compound having a standard electrode potential ranging from 130 mV to -2400 mV at 25°C with respect to the standard hydrogen electrode, whereby an oxidation reduction potential of the contaminated matter reduced is maintained at not more than +130 mV for at least 5 days by adding the reducing agent, wherein the contaminated matter mixed with the reducing agent and the nutritional liquid has a water content of at least 40% by weight.